

RECEIVED

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720

**District III**  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

JUL 26 2018

Form C-101  
Revised July 18, 2013

## Energy Minerals and Natural Resources

Oil Conservation Division

DISTRICT II-ARTESIA O.C.D.

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

## APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Fasken Oil and Ranch, Ltd. <sup>1</sup> Operator Name and Address		151416 <sup>2</sup> OGRID Number	
6101 Holiday Hill Road		30-015-34429 <sup>3</sup> API Number	
Midland, TX 79707			
<sup>4</sup> Property Code 18197	<sup>5</sup> Property Name Howell State Com		<sup>6</sup> Well No. 3

<sup>7</sup> Surface Location

UL - Lot N	Section 32	Township 20S	Range 25E	Lot Idn	Feet from 660	N/S Line South	Feet From 1980	E/W Line West	County Eddy
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<sup>8</sup> Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
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<sup>9</sup> Pool Information

Pool Name Seven Rivers Hills; Atoka N.	Pool Code 97272
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## Additional Well Information

<sup>11</sup> Work Type P	<sup>12</sup> Well Type G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type S	<sup>15</sup> Ground Level Elevation 3664'
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 8962'	<sup>18</sup> Formation Atoka	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 3/1/06
Depth to Ground water 183'		Distance from nearest fresh water well 1400'		Distance to nearest surface water greater than 1 mile

☒ We will be using a closed-loop system in lieu of lined pits<sup>21</sup> Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
	17 1/2"	13 3/8"	48	411'	400	
	12 1/4"	9 5/8"	36	2968'	800	
	8 3/4"	4 1/2"	11.6	9775'	1100	

## Casing/Cement Program: Additional Comments

<sup>22</sup> Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.Signature: *Stephanie Gutierrez*

Printed name: Stephanie Gutierrez

Title: Regulatory Analyst

E-mail Address: stephanieg@forl.com

Date: 7/23/18

Phone: 432-687-1777

## OIL CONSERVATION DIVISION

Approved By:

*Raymond N. Podany*

Title:

Approved Date: 7-26-18

Expiration Date: 7-26-20

Conditions of Approval Attached

District I  
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State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-34429		<sup>2</sup> Pool Code 97272	<sup>3</sup> Pool Name Seven Rivers; Atoka N.
<sup>4</sup> Property Code 18197	<sup>5</sup> Property Name Howell State Com		<sup>6</sup> Well Number 3
<sup>7</sup> OGRID No. 151416	<sup>8</sup> Operator Name Fasken Oil and Ranch, Ltd.		<sup>9</sup> Elevation 3664'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	32	20S	25E		660	South	1980	West	Eddy

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 320		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	<p><b><sup>17</sup> OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well as this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Stephanie Gutierrez</i> 7/23/18 Signature Date</p> <p>Stephanie Gutierrez Printed Name</p> <p>stephanieg@forl.com E-mail Address</p>		
	<p><b><sup>18</sup> SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date of Survey Signature and Seal of Professional Surveyor:</p> <p>Certificate Number</p>		

RUP 7-26-18

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Form C-102  
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Submit one copy to appropriate  
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-34429		<sup>2</sup> Pool Code <del>99232</del> 74680	<sup>3</sup> Pool Name Cemetery Seven Rivers, Atoka N.
<sup>4</sup> Property Code 18197	<sup>5</sup> Property Name Howell State Com		<sup>6</sup> Well Number 3
<sup>7</sup> OGRID No. 151416	<sup>8</sup> Operator Name Fasken Oil and Ranch, Ltd.		<sup>9</sup> Elevation 3664'

\* Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	32	20S	25E		660	South	1980	West	Eddy

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	<p><b>" OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Stephanie Gutierrez</i> 7/23/18 Signature Date</p> <p>Stephanie Gutierrez Printed Name</p> <p>stephanieg@forl.com E-mail Address</p>			
	<p><b>*SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date of Survey Signature and Seal of Professional Surveyor:</p>			
	<p>Certificate Number</p>			
	<p>RW 7-26-18</p>			

**Howell State Com No. 3  
660' FSL & 1980' FWL  
Sec 32, T20S R25E**

<b>OBJECTIVE:</b>		<b>Recomplete to Atoka or Wolfcamp</b>
<b>WELL DATA:</b>		
API Number:	30-015-34429	
13-3/8" 48#/ft H-40 casing:	Set at 410.64' KB Cmt w/400 sx "C" (14.8 ppg, 1.32 ft3/sk). TOC surface, circ 97 sx	
9-5/8" 36.0#/ft J-55 casing:	Set at 2967.67' KB, Cmt w/ 600 sx "C" w/4% gel (13.5 ppg, 1.74 ft3/sk) +200 sx "C" w/2% CaCl2 (14.8 ppg, 1.32 ft3/sk). TOC surface, circ 313 sx.	
4-1/2" 11.6# N-80 LT&C casing:	Set at 9,774.99' Cmt w/1100 sx BJ Super "H" (13.8 ppg, 1.39 ft3/sk). TOC 6472 by temp survey. Marker jts 10.15' @ 7187.93', and 11.17' @ 9326.09'	
Perfs:	Morrow:	
	9413'-34' (22h, 8-8-06)	
	CIBP 8480' (8-4-06)	
	9501'-04' (6-22-06)	
	9514'-22' (6-22-06)	
	9580'-9586' (5-18-06)	
Tubing:	3-1/2" WL entry guide (0.40'), 2-3/8" x10' EUE 8rd N80 tubing sub (10.09'), 4-1/2" Arrowset IX 10k (6.18'), 3-3/4" x 2-3/8" x 1.875" "F" steel profile nipple TOSSD (1.72'), 295 jts EUE 8rd N-80 tbg (9301.98')	
TD:	9,800'	
PBTD:	9770' (9,725.39' Float Collar)	

1. Test mast anchors.
2. Set test tank and lay flowline.
3. RUPU. Receive 6 jts 2-3/8" EUE 8rd N80 tubing to tag PBTD.
4. RU pump truck and kill well w/ 35 bbls 2% KCL w/corrosion inhibitor, biocide, and oxygen scavenger.
5. NDWH, NU BOP.
6. Release packer, POW with tubing and packer.
7. RU WL lubricator. RIW with 4-1/2" CIBP and set at +/-9350' (minimum 50' above top perforation at 9413'). RIW with WL bailer and spot 35' (3sx) of Class "H" neat cement on CIBP for PBTD 9315' (bottom of Atoka perforations 9103'). RD WL.
8. RU pump truck and load well with fresh water. Test casing and plug to 3000 psi on chart recorder w/1 hr clock (calibrated within last 6 months).
9. RIW with 2-3/8" EUE 8rd WL entry guide, 2-3/8"x10' EUE 8rd N-80 tubing sub, Arrowset IX 10k packer, TOSSD with 1.781" "F" profile nipple, about 281 joints 2-3/8" EUE 8rd 4.7#/ft N-80 tubing to and set packer at +/- 8875'.
10. Release TOSSD and circulate well with 2% KCL water w/corrosion inhibitor, biocide, and oxygen scavenger.
11. ND BOP. NUWH double valve flow tree, setting packer in 12 points compression.
12. Swab tubing volume to 8000' from surface.
13. RUWL with 3000 psi lubricator and grease. Perforate Atoka with 1-11/16" Gamma strip gun as follows:

8958' – 69' (10h, 1JSPF)

9034' – 38' ( 5h, 1JSPF)

9096' – 9103' ( 8h, 1JSPF)

23 total holes by Halliburton Spectral Density/Dual Spaced Neutron Log dated 29-Apr-2006. POW, checking that all shots fired, and RDWL.

14. Flow test, swab and evaluate fluid entry.
15. If stimulation necessary, RU pumping service. Trap 500 psi on annulus. Acidize Atoka perms 8958'-9103' (23h) via 2-3/8" tubing with 750 gal 7-1/2% HCL dropping 40 1.3 sp. gr. RCN ball sealers evenly spaced in the last 500 gallons. Max pressure 3000 psi. Flush with 2% Kcl water. RD stimulation service.
16. Swab and flow back acid and load water to steel test tank and evaluate.
17. Flow well and evaluate.
18. Return well to sales.
19. If Atoka is non-commercial, RU pump truck and kill well w/ 35 bbls 2% KCL w/corrosion inhibitor, biocide, and oxygen scavenger.
20. NDWH, NU BOP.
21. Release packer, POW with tubing and packer.
22. RIW with 4-1/2" CIBP, 4' perforated sub, SN, 2-3/8 EUE 8rd 4.7#/ft N-80 tubing, and set CIBP at +/-8900' (minimum 50' above top perforation at 8958').
23. RU pump truck and circulate well with 2% Kcl w/corrosion inhibitor, biocide, and oxygen scavenger.
24. Test casing and plug to 2500 psi on chart recorder w/1 hr clock (calibrated within last 6 months).
25. RU cementers and pump 29 bbls 9.5 ppg mud laden brine water containing 12.5#/bbl salt gel, 1 bbl freshwater spacer and spot 25 sx class "H" cement (1.07 cuft/sk yield) above CIBP 8900' for a PBTD of 8593' (bottom of Wolfcamp perforations 7285'). Displace cement with 1 bbl fresh water spacer and 2% Kcl water. POW 10 stands and WOC 4 hours and tag plug at 8593'.
26. POW laying down 54 joints 2-3/8" EUE 8rd 4.7#/ft N-80 tubing.
27. RIW with 2-3/8" EUE 8rd WL entry guide, 2-3/8"x10' EUE 8rd N-80 tubing sub, Arrowset IX 10k packer, TOSSD with 1.781" "F" profile nipple, about 281 joints 2-3/8" EUE 8rd 4.7#/ft N-80 tubing to and set packer at +/- 7175'.
28. Release TOSSD and circulate well with 2% KCL water w/corrosion inhibitor, biocide, and oxygen scavenger.
29. ND BOP. NUWH double valve flow tree, setting packer in 12 points compression.
30. Swab tubing volume to 6000' from surface.
31. RUWL with 3000 psi lubricator and grease. Perforate Wolfcamp with 1-11/16" Gamma strip gun as follows:

7248' – 72' ( 9h, 1JSPF)

7274' – 85' (12h, 1JSPF)

21 total holes by Halliburton Spectral Density/Dual Spaced Neutron Log dated 29-Apr-2006. POW, checking that all shots fired, and RDWL.

32. Flow test, swab and evaluate fluid entry.
33. If stimulation necessary, RU pumping service. Trap 500 psi on annulus. Acidize Atoka perms 7264'-85' (21h) via 2-3/8" tubing with 1500 gal 15% NEFE HCL acid dropping 60 ball sealers evenly spaced. Rate 2-4 bpm at max pressure 3000 psi. RD stimulation service.
34. Swab and flow back acid and load water to steel test tank and evaluate.
35. Flow well and evaluate.
36. Return well to sales.
37. RDPU.

7-20-18

# Howell State Com No. 3

Current as of 8-7-06

GL: 3664'

KB: 3681.5'

Operator: **Fasken Oil and Ranch, Ltd.**

Location: 660' FSL and 1980' FWL  
Sec 32, T20S, R25E  
Eddy County, NM

Compl.: 05/1/2006 released rig

API #: 30-015-34429

TD: 9800'

PBTD: 9770' (9,725.39' FC)

Casing: **13-3/8" 48# H-40 @ 410.64'**

w/400 sx "C"+2% CaCl<sub>2</sub> (14.8ppg, 1.32 ft<sup>3</sup>/sk)  
TOC surf, circ 97 sx

**9-5/8" 36# J-55 @ 2967.67' KB**

w/600sx "C" w/4% gel (13.5ppg, 1.74 ft<sup>3</sup>/sk)  
+200sx "C" w/2% CaCl<sub>2</sub> (14.8ppg, 1.32 ft<sup>3</sup>/sk)  
TOC surf, circ 313 sx

**4-1/2" 11.6# N-80 LT&C @ 9,774.99'**

1100 sx BJ Super "H" (13.8ppg, 1.39ft<sup>3</sup>/sk)  
TOC 6472' by Temp

13-3/8" 48# H-40 @ 410.64'

TOC surf, circ 97 sx

9-5/8" 36# J-55 @ 2967.67' KB

TOC surf, circ 313 sx

TOC 6472' by Temp

Mrkr Jt 10.15' @ 7187.93'-7198.08'

## Tubing:

8/6/2018	3-1/2" WL entry guide	0.40
	2-3/8"x10' EUE 8rd N-80 tbg sub	10.09
AJL:	4-1/2" Arrowset IX 10k w/	6.18
31.53	3-3/4"x2-3/8" TOSSDw/1.875" "F"PN	1.72
	295 jts 2-3/8" EUE 8rd N-80 tbg	<u>9301.98</u>
	Total	9320.37
	KB	17.00
	Slackoff (23pts)	-2.00
	EOT	9335.37

## Perfs:

Morrow  
9413'-34' (22H, 0.23" EHD) 8/8/2006

## CIBP

9480' 8/4/2006  
9501'-9504' (4H, 0.23" EHD) 6/22/2006  
9514'-9522' (9H, 0.23" EHD) 6/22/2006  
9580'-9586' (36h, 0.41 EHD) 5/18/2006

Hole Sizes 17-1/2" 410', 12-1/4" 2995', 8-3/4" 9800'

Pkr: 9318.70

Mrkr Jt 11.17' @ 9326.09'-9337.26'

9413'-34'

CIBP 9480'

9501'-9504'

9514'-9522'

9580'-9586'

PBTD: 9770' (9,725.39' FC)

TD: 9800'

4-1/2" 11.6# N-80 LT&C @ 9,774.99'

cwb

7/24/2018

HowellStCom3 wb diagram.xls

# Howell State Com No. 3

Proposed Atoka 7-20-18

GL: 3664'

KB: 3681.5'

Operator: **Fasken Oil and Ranch, Ltd.**

Location: 660' FSL and 1980' FWL

Sec 32, T20S, R25E

Eddy County, NM

Compl.: 05/1/2006 released rig

API #: 30-015-34429

TD: 9800'

PBTD: 9770' (9,725.39' FC)

Casing: **13-3/8" 48# H-40 @ 410.64'**

w/400 sx "C" w/2% CaCl<sub>2</sub> (14.8ppg, 1.32 ft<sup>3</sup>/sk)

TOC surf, circ 97 sx

**9-5/8" 36# J-55 @ 2967.67' KB**

w/600sx "C" w/4% gel (13.5ppg, 1.74 ft<sup>3</sup>/sk)

+200sx "C" w/2% CaCl<sub>2</sub> (14.8ppg, 1.32 ft<sup>3</sup>/sk)

TOC surf, circ 313 sx

**4-1/2" 11.6# N-80 LT&C @ 9,774.99'**

1100 sx BJ Super "H" (13.8ppg, 1.39ft<sup>3</sup>/sk)

TOC 6472' by Temp

Proposed

Tubing:

3-1/2" WL entry guide 0.40

2-3/8"x10' EUE 8rd N-80 tbg sub 10.00

AJL: 4-1/2" Arrowset IX 10k w/ 6.20

31.53 3-3/4"x2-3/8" TOSSDw/1.875" "F" PN 1.70

281 jts 2-3/8" EUE 8rd N-80 tbg 8860.00

Total 8878.30

KB 17.00

Slackoff (23pts) -2.00

EOT 8893.30

Proposed:

Atoka **8958'-69'** (10h, 1spf, 0.23")

**9034'-38'** (5h, 1spf, 0.23")

**9096'-9103'** (8h, 1spf, 0.23")

Plug1 **9315'-9350'** 3sx"H" dmp bailer

CIBP **9350'**

Morrow

9413'-34' (22H, 0.23" EHD) 8/8/2006

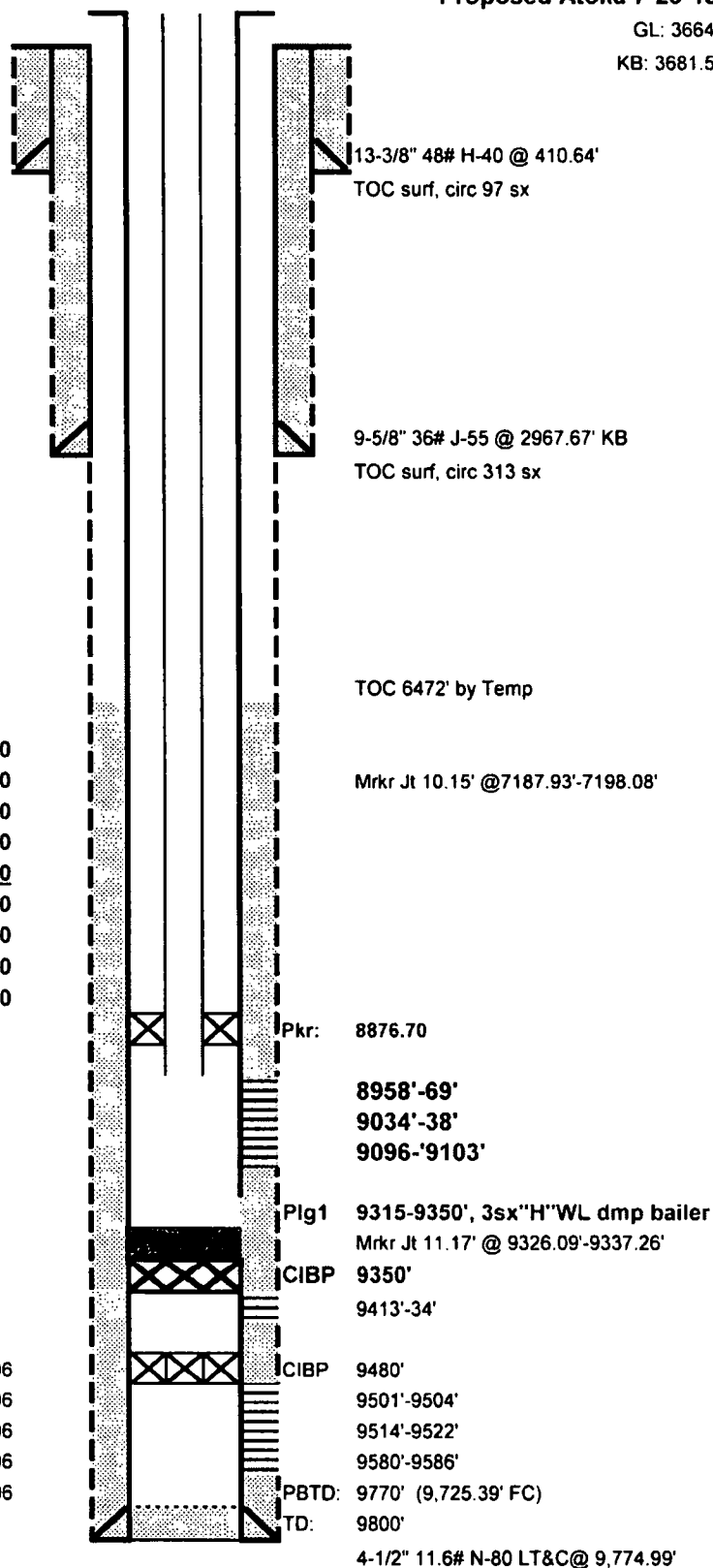
CIBP 9480' 8/4/2006

9501'-9504' (4H, 0.23" EHD) 6/22/2006

9514'-9522' (9H, 0.23" EHD) 6/22/2006

9580'-9586' (36h, 0.41 EHD) 5/18/2006

Hole Sizes 17-1/2" 410', 12-1/4" 2995', 8-3/4" 9800'



cwb

7/24/2018

HowellStCom3 wb diagram.xls



# Howell State Com No. 3

Proposed Wolfcamp 7-20-18

GL: 3664'

KB: 3681.5'

Operator: **Fasken Oil and Ranch, Ltd.**

Location: 660' FSL and 1980' FWL

Sec 32, T20S, R25E

Eddy County, NM

Compl.: 05/1/2006 released rig

API #: 30-015-34429

TD: 9800'

PBTD: 9770' (9,725.39' FC)

Casing: **13-3/8" 48# H-40 @ 410.64'**

w/400 sx "C"+2% CaCl<sub>2</sub> (14.8ppg, 1.32 ft<sup>3</sup>/sk)

TOC surf, circ 97 sx

**9-5/8" 36# J-55 @ 2967.67' KB**

w/600sx "C" w/4% gel (13.5ppg, 1.74 ft<sup>3</sup>/sk)

+200sx "C" w/2% CaCl<sub>2</sub> (14.8ppg, 1.32 ft<sup>3</sup>/sk)

TOC surf, circ 313 sx

**4-1/2" 11.6# N-80 LT&C @ 9,774.99'**

1100 sx BJ Super "H" (13.8ppg, 1.39ft<sup>3</sup>/sk)

TOC 6472' by Temp

Proposed

Tubing:

3-1/2" WL entry guide 0.40

2-3/8"x10' EUE 8rd N-80 tbg sub 10.00

AJL: 4-1/2" Arrowset IX 10k w/ 6.20

31.53 3-3/4"x2-3/8" TOSSDw/1.875" "F" PN 1.70

227 jts 2-3/8" EUE 8rd N-80 tbg 7157.00

Total 7175.30

KB 17.00

Slackoff (23pts) -1.00

EOT 7191.30

Proposed:

**Wolfcamp 7264'-72'** (9h, 1spf, 0.23")

**7274'-85'** (12h, 1spf, 0.23")

Plug2 8593'-8900' 25 sx "H" Tag

CIBP 8900'

Atoka 8958'-69' (10h, 1spf, 0.23")

9034'-38' (5h, 1spf, 0.23")

9096'-9103' (8h, 1spf, 0.23")

Plug1 9315'-9350' 3sx "H" dmp bailer

CIBP 9350'

Morrow

9413'-34' (22H, 0.23" EHD) 8/8/2006

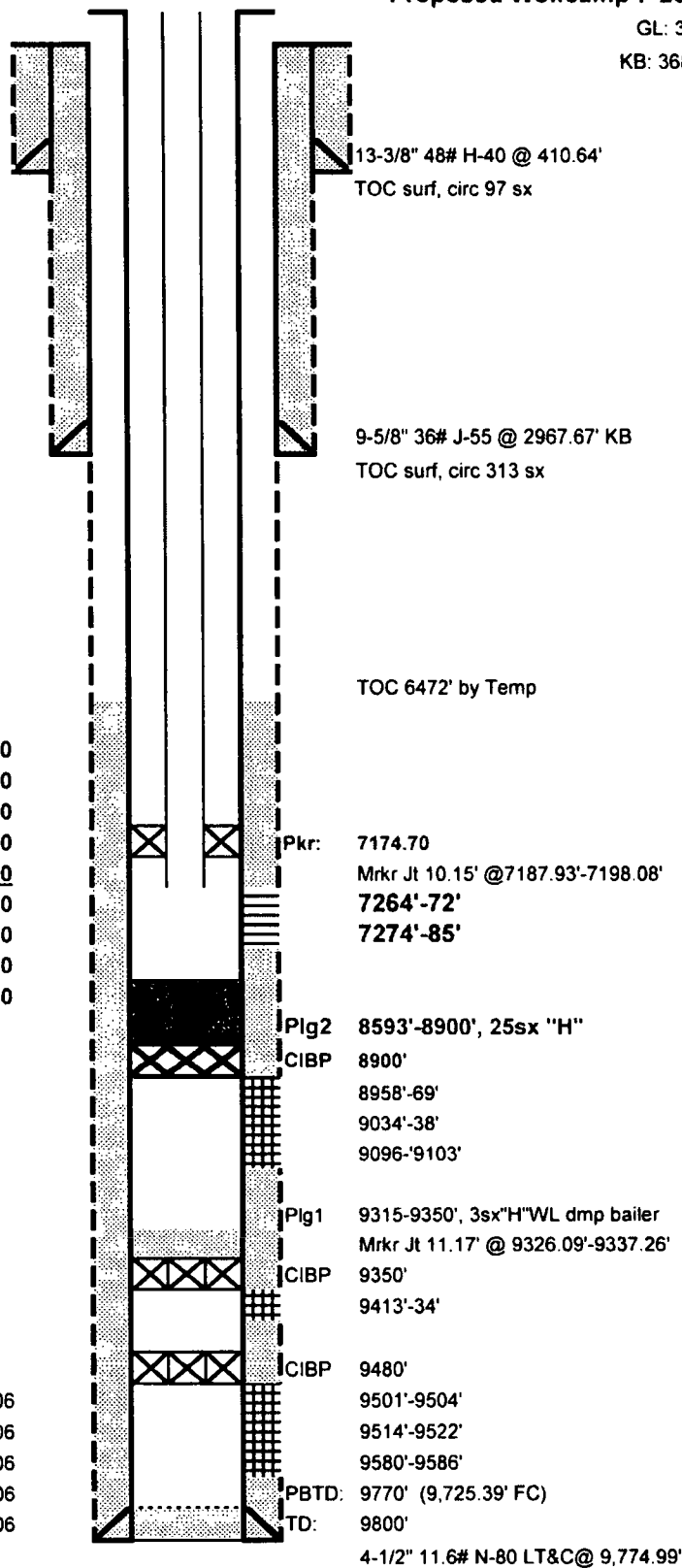
CIBP 9480' 8/4/2006

9501'-9504' (4H, 0.23" EHD) 6/22/2006

9514'-9522' (9H, 0.23" EHD) 6/22/2006

9580'-9586' (36h, 0.41 EHD) 5/18/2006

Hole Sizes 17-1/2" 410', 12-1/4" 2995', 8-3/4" 9800'



dak

7/24/2018

HowellStCom3 wb diagram.xls